

# Outbreaks of Multidrug-Resistant *Salmonella* Serotype Typhimurium Infections Associated with Small Animal Veterinary Facilities in Idaho, Minnesota, and Washington, 1999

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**Background:** An estimated 1.4 million persons are infected with *Salmonella* annually in the United States. While the majority of these infections are acquired from eating contaminated foods, *Salmonella* also is transmitted through contaminated water and contact with reptiles, farm animals, and pets. Outbreaks of human *Salmonella* infections associated with veterinary facilities have been infrequently reported and most such outbreaks occurred in large animal (e.g., cattle, horses) facilities. Outbreaks associated with small animal (e.g., dog, cat) facilities are rare.

**Methods:** Routine laboratory-based *Salmonella* surveillance was conducted in Idaho, Minnesota, and Washington; clinical laboratories forwarded *Salmonella* isolates to the state public health laboratories for serotyping. Field investigations were conducted by the state health departments. Selected *Salmonella* isolates were forwarded to CDC for phage typing and antimicrobial susceptibility to 17 antimicrobial agents using broth microdilution (Sensititre). Selected *Salmonella* isolates from the state veterinary diagnostic laboratory in Minnesota also were forwarded to the state public health laboratory for pulse-field gel electrophoresis (PFGE).

**Results:** In 1999, outbreaks of *Salmonella* serotype Typhimurium associated with small animal veterinary facilities were reported in Idaho, Minnesota, and Washington. In Idaho, 10 of 20 employees of a veterinary clinic became ill after employees cared for kittens ill with diarrhea; ill employees reported no other common exposures. Specimens were not collected from the kittens, but stool specimens from five ill persons yielded *S. Typhimurium* resistant to ampicillin, chloramphenicol, sulfonamides, streptomycin and tetracycline (R-type ACSSuT). In Minnesota, *S. Typhimurium* DT104 R-type ACSSuT was isolated from 9 cats at an animal shelter that died from enteritis. These isolates were indistinguishable by PFGE from isolates from 7 ill persons, 6 of whom reported a connection with the animal shelter. In Washington, *S. Typhimurium* DT104 R-type ACSSuT was isolated from three ill employees or clients of a veterinary facility. Specimens from 14 cats associated with the facility also yielded *S. Typhimurium* DT104 R-type ACSSuT.

**Conclusion:** Three states reported outbreaks of multidrug-resistant *S. Typhimurium* infections among employees or clients of small animal facilities. In each facility, employee or client illness followed illness in animals. These outbreaks demonstrate the need for increased hygiene within small animal facilities and at home, especially after handling of animal feces.

## Suggested citation:

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